

Docket No. 010048

Serial No. 09/922,997

REMARKS/ARGUMENTSStatus of Prosecution

Claims 1-45 are pending in the present application. A Final Office Action was transmitted on May 25, 2005 rejecting all claims. The amendments herein are transmitted in conjunction with a **Request for Continued Examination**.

Remarks

The presently claimed invention is a method for detecting whether repeaters are being used in a wireless communication system by means of detecting propagation delays and calibrating out the repeater delays in order to determine a position of a remote terminal. LeBlanc, et al. teaches a method of locating a remote terminal based on signal characteristic measurements. "In particular, this subsystem receives samples of wireless signal characteristic measurements such as a plurality of relative signal strengths and corresponding signal time delay value pairs, wherein such samples are used by this subsystem to produce the component with the least amount of multipath, as evidenced in the sample by the short time delay value, wherein each such value pair is associated with wire less signal transmissions between the target mobile station and a particular base station of a predetermined wireless base station infrastructure." Col. 11, lines 13- 22. LeBlanc et al., does not teach or imply calibrating out repeater delays for determining a position of a remote terminal.

Claims 1-21 were rejected under 35 USC §103(a) as being unpatentable over LeBlanc et al.. As previously indicated, Leblanc et al., does not teach a method of determining whether a repeater is in the communication loop and secondly calibrating out the delay introduced by the repeater for a remote terminal location. The sections cited by the Examiner for a repeater associated with a origination source (abstract, Figs. 1-2, col. 17, lines 14 through col. 19, line 60 and col. 39, lines 7-67) fails to identify any type of repeater. The particular sources identified in LeBlanc are base stations, mobile stations and mobile switch centers. The word repeater used in Leblanc et al., is used only four times in the entire patent at col. 34, lines 4-9; "The importance of understanding and characterizing the aggregate system delay elements is shown in FIG. 6: Distributed Antenna Delay Characterization. For any given Pilot Channel offset "1", additional delay is introduced by the microwave propagation channel (Point A) and any internal repeater/amplifier equipment (Point B). Each

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of four delay elements t.sub.1 through t.sub.4 introduce further delay", col. 34, lines 58-61; "The transmission line between the CDMA Base station/PBX and the distributed antennas may be via a pair of dedicated, beam-focused high gain antennas, and/or a repeater system", col. 35, lines 28-30; "Reference FIG. 6, which illustrates a typical distributed antenna configuration consisting of a repeater/amplifier and four distributed antennas", and col. 34, lines 34-42; "During the installation phase of the high gain antenna (if required), repeater (if required) and the distributed antennas, if the system delay is measured at each distributed antenna and the values stored in a location database, including each antenna identification, and exact physical location (in three dimensions), then during a location request, all fixed delays will be known, thus the TP value can be determined by subtracting the fixed, known delay values from T_i , the measured time of arrival". The Leblanc et al., reference locates by using known delays from fixed transmitting sources for location. It is absolutely silent on providing any information from or on repeaters for location determination. However, in order to further set out the distinguishing features of the present invention, independent claims 1, 7, 12 and 16 have been amended. In addition, dependent claim 3 has been amended for consistency. With these amendments and arguments, the rejections have been overcome and these claims are allowable.

Claims 22-25 and 29-45 were rejected under 35 USC § 103(a) as being unpatentable over LeBlanc, et al., in view of Fernandez-Corbin, et al.. The Applicant reassert its arguments as set forth in the previous section as if fully set forth herein. LeBlanc, et al., and Fernandez-Corbin, et al., fail to teach either individually or in combination a method of calibrating out a delay from repeaters for a location determination of a remote terminal location. Independent claims 22, 29 and 31 were amended to more clearly set out the feature of calibrating out the repeater delays for the location determination. In addition, independent claim 39 was amended to fix some clerical errors.

Claims 26-28 were rejected under 35 USC § 103(a) as being unpatentable over LeBlanc, et al., in view of Fernandez-Corbin, et al., and in further view of Fuchs, et al.. Each of these claims are dependant claims, thus due to the allowability of the independent claim, these claims are also allowable.

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Applicant through his attorney respectfully requests that the three month shortened statutory period for response to the outstanding Office Action of May 25, 2005, due August 25, 2005, be extended three (3) months under 37 CFR § 1.136(a) to November 25, 2005.

Please charge Deposit Account No. 17 - 0026 of QUALCOMM Incorporated in the amount of \$1020.00 to pay the necessary fee due under 37 CFR § 1.17 to extend the period for response three months from August 25, 2005, to November 25, 2005. The Commissioner is hereby further authorized to charge payment of any additional fees which may be required, or credit any overpayment, to Deposit Account No. 17 - 0026.

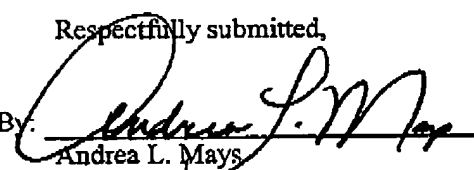
Having responded to each and every objection and rejection raised by the Examiner, it is believed that the patent application is now in condition for allowance, and such allowance is respectfully requested. If the Examiner has any questions or suggestions for expediting an allowance in this matter, the Examiner is invited to call the undersigned collect.

The Commissioner is authorized to charge any fees or credit any overpayment under 37 CFR §§ 1.16 and 1.17 which may be required during the entire pendency of the application to Deposit Account No. 17-00260.

Applicants therefore respectfully request that a timely Notice of Allowance be issued in this case.

Dated: November 3, 2005

Respectfully submitted,

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